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Patent Law Agency, LLC PETER GANJIAN 3146 North Verdugo Road Glendale, CA 91208-1665			EXAMINER BOLDEN, ELIZABETH A	
			ART UNIT 1731	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/054,328	<b>Applicant(s)</b> MARGARYAN, ALFRED A.	
	<b>Examiner</b> Elizabeth A. Bolden	<b>Art Unit</b> 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-16 and 18-38 is/are pending in the application.
- 4a) Of the above claim(s) 13-15 and 27-29 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-10,12,16,18-26 and 30-38 is/are rejected.
- 7) ☒ Claim(s) 1,2 and 30-38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

Any rejections and or objections, made in the previous Office Action, and not repeated below, are hereby withdrawn.

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6 June 2006 has been entered.

***Information Disclosure Statement***

The information disclosure statements (IDS) submitted on 15 November 2010 have been considered by the examiner. However, 2 of the IDSs filed contain only duplicate citations from the third IDS and therefore the citations have been crossed through. Additionally, the information disclosure statement filed 15 November 2010 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. The citations which have been crossed through have been annotated on the IDS as to why the citations were not been considered and why. See the annotated IDS filed 15 November 2010.

***Specification***

The amendment filed 29 August 2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The amendment to Table II results in the table being new matter. The examples have had the mol% values in the  $\text{BaF}_2 + \text{RF}_x$  column of the table changed which results in the base glass composition now comprising 100 mol% of glass. While this amendment clarifies to one of

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ordinary skill in the art that the dopant component, which is terms of weight percent is calculated from the total weight of base glass, the specification does not support the specific changes to the examples in Table II. On page 9, lines 9-12, of the amendment filed 29 August 2003, Applicant's states that the amendment to the table is to correct a clerical error. However, MPEP 2136.07 states:

“An amendment to correct an obvious error does not constitute new matter where one skilled in the art would not only recognize the existence of error in the specification, but also the appropriate correction. In re Oda...”

While the changes to the table are within the scope of the ranges defined by the original specification, it is unclear how one of ordinary skill in the art would have known that the unidentified 2% from the first eight examples should have been added to the  $\text{BaF}_2 + \text{RF}_x$  component rather than  $\text{Ba}(\text{PO}_3)_2$ ,  $\text{Al}(\text{PO}_3)_2$ , or an unspecified component. Therefore, the amendment constitutes new matter. Applicant arguments filed 6 June 2006 states that the changes to the table were obvious errors and that based on the disclosure of the present invention one of ordinary skill in the art would have known to increase the fluoride ( $\text{BaF}_2 + \text{RF}_x$ ) content. This is not deemed persuasive since any of the recited components could have had the undefined 2% or there could have been 2% of unidentified components. Without evidence to support the 2% addition to the ( $\text{BaF}_2 + \text{RF}_x$ ) content the table should remain as originally filed and the new matter removed.

Applicant is required to cancel the new matter in the reply to this Office Action.

### ***Claim Objections***

Claims 1 and 2 are objected to because of the following informalities: minor formatting or grammatical errors.

In claim 1, line 4 “ $\text{Al}(\text{PO}_3)_3$ ” should read “ $\text{Al}(\text{PO}_3)_3$ ”.

In claim 2, line 1, “fluorophosphates” should read “fluorophosphates”.

Appropriate correction is required.

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Claims 30-38 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 30-38 do not further limit the claims from which they depend since the claims refer back to a dopant that has closed claim language, which is not open to additional possible components.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2, 8, 16, 22, and 23 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Currently, claims 1, 2, 8, 16, 22, and 23 ranges are not fully supported in the specification. The Examiner has determined that the claimed ranges are supported based on the several ranges recited in the original specification in paragraph [0013], Table I: Range I and Range II, as well as several ranges determined from the original claims. For complete disclosure of covered the ranges determined by the original specification and claims the following amendments to the specification for the ranges should be made and would not be considered new matter.

To paragraph [0013], the Examiner determined the ranges should read:

Ba(PO<sub>3</sub>)<sub>2</sub>, 5-60 mol %; Al(PO<sub>3</sub>)<sub>3</sub> 5-60 mol %; BaF<sub>2</sub>+RFx, 10-90 mol %; and a dopant of 2-20 wt %.

To Table I, Range I, the Examiner determined the ranges should read:

Ba(PO<sub>3</sub>)<sub>2</sub>, 0-95 mol %; Al(PO<sub>3</sub>)<sub>3</sub> 0-95 mol %; BaF<sub>2</sub>+RFx, 5-90 mol %.

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Claims 7 and 21 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 7 and 21 recites that the dopant is "fluorides of the rare earth elements", however, nowhere in the specification does it recite that the rare earth dopant could be a fluoride, only an oxide of the rare earth elements.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4, 8-10, 16, 18, 22-26, and 30-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rendered indefinite because it is unclear how to interpret the limitation "BaF<sub>2</sub>+RFx" in line 5. It is unclear if the phrase "BaF<sub>2</sub>+RFx" means that both the BaF<sub>2</sub> and the RFx component are required or if one only one or possibly more than one of the components BaF<sub>2</sub> or RFx are required. For example, it is unclear if the 10-80 mol percent of "BaF<sub>2</sub>+RFx" can be met by which of the following possible scenarios: 1) 20 mol % of BaF<sub>2</sub> only and no RFx component, 2) require both BaF<sub>2</sub> and RFx: 10 mol % BaF<sub>2</sub> and 10 mol % PbF<sub>2</sub>, or 3) NO BaF<sub>2</sub> component and only a RFx component: 20 mol % PbF<sub>2</sub> only. For the purposes of examination "BaF<sub>2</sub>+RFx" is read such that the range can be met if one or more of the following components falls within the recited range: BaF<sub>2</sub>, CaF<sub>2</sub>, MgF<sub>2</sub>, PbF<sub>2</sub> or BiF<sub>3</sub>.

Claims 8-10, 16, and 22-26 are rendered indefinite because it is unclear how to interpret the limitation "BaF<sub>2</sub>+RFx". See the above 35 U.S.C. 112 rejection over claim 1.

Additionally, it is unclear if there is a difference between "BaF<sub>2</sub> + RFx" as recited in claims 1 and 8-10 and "BaF<sub>2</sub>+RFx" as recited in claims 16 and 22-26. The difference relates to the spacing of the phrase.

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Claims 1, 8-10, and 22-26 are rendered indefinite for failing to properly use the correct language associate with a Markush group. In line 5, the phrase “selected from the group comprising of” should read “selected from the group consisting of”, so that the closed Markush group has the correct transitional phrase.

Claims 4 and 18 are rendered indefinite for failing to properly use the correct language associate with a Markush group. In lines 1-2, the phrase “selected from the group comprising” should read “selected from the group consisting of”, so that the closed Markush group has the correct transitional phrase.

Claim 30 is rendered indefinite since claim 1 recites that the dopant is a rare earth dopant yet manganese is not a rare earth element.

Claims 30-38 are rendered indefinite for reciting a component, an oxide of manganese, not recited in the closed Markush group from which the dependent claim depends.

#### ***Examiner's Comment***

As to the rejection of the newly submitted claims 30-38, the Examiner understands the purpose of the amendment to the claims was to clear up the confusion of the listing of the rare earth elements and the manganese oxide for the dopant. The original claim language of claim 22 recited “a dopant from 2 to 20 weight percent, selected from the group consisting of: the oxides of the rare earth elements neodymium (Nd), erbium (Er), Ytterbium (Yb), thulium ( Tm ), terbium (Tb), holmium (Ho), praseodymium (Pr), samarium (Sm), europium (Eu); an oxide of manganese (Mn); and mixtures thereof”, the use of the semicolons defines that the oxide of manganese as a separate component and not part of the recited rare earths. However, for clarity purposes the claim might be amended to remove the phrase “rare earth element”, to read “a dopant from 2 to 20 weight percent, selected from the group consisting of: the oxides of: neodymium (Nd), erbium (Er), Ytterbium (Yb), thulium ( Tm ), terbium (Tb), holmium (Ho), praseodymium (Pr), samarium (Sm), europium (Eu); an oxide of manganese (Mn); and mixtures thereof” However since claim 1 reads “a rare earth dopant”, manganese could not be included in

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the listing. Use of the semicolon to separate the oxide of manganese and the possible removal of the phrase “rare earth” might correct some of the above claim objections and 112 rejections in the instant claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6, 7, 16-18, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tran, U.S. Patent 5,809,199.

Tran teaches a fluorophosphate glass having the following composition in terms of mol %:  $P_2O_5 + Al(PO_3)_3 + Ba(PO_3)_2 + Mg(PO_3)_2 + NaPO_3$  of 0-25,  $AlF_3$  of 20-45,  $RF_2$  25-65 where R is an alkaline earth metal,  $LnF_3$  0-25 where Ln is a lanthanide, and MF 0-15 where M is an alkali metal. See column 3, lines 34-57.

Tran differs from the instant invention by not teaching and examples or the rare earth component in terms of weight percent. However, it appears that if the rare earth component were converted to weight percent in accordance with the instant invention, the rare earth component of Tran would overlap the dopant component of the instant invention. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Claims 1, 2, 4-10, 16, 18-24, and 30-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al., U.S. Patent 5,755,998.



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Yamazaki et al. teach a fluorophosphates glass having the following composition in terms of mol % of the ion: P 1-15, Al 1-18, Mg 0-12, Ca 0-18, Sr 1-21, Ba 0-28, Zn 0-3.5, Eu 0.01-0.8, Tb 0.2-4, Sm 0-3, Mn 0-1, Ln 0-4 where Ln is Y, La, Gd, Yb, Lu, Dy, or Tm, Ce 0-0.2, R 0-3 where R is Li, Na, or K, O 4-55, F 15-70, and Cl 0-10 See column 3, lines 24-57.

Yamazaki et al. differ from the instant invention by not teaching any examples and by not teaching the glass composition in terms of glass forming components but rather in terms of atoms for making up the glass. Yamazaki et al. also differs from the instant invention by teaching the rare earth component in terms of mole percent. However, it appears that if the composition were converted to glass forming component mole % and the rare earth component were converted to weight percent in accordance with the instant invention, the composition and the rare earth component of Yamazaki et al. would overlap the dopant component of the instant invention. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Claims 1, 2, 4-6, 8, 9, 16, 18-20, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kodama, U.S. Patent 4,386,163.

Kodama teaches a fluorophosphates glass comprising 13-39 wt% of  $\text{Al}_2(\text{PO}_3)_3$ , 5-19 wt%  $\text{Ba}(\text{PO}_3)_2$ , 0-24 wt%  $\text{Mg}(\text{PO}_3)_2$ , 1-20 wt %  $\text{Ca}(\text{PO}_3)_2$ , 0-8 wt%  $\text{AlF}_3$ , 2-13 wt%  $\text{MgF}_2$ , 0-20 wt%  $\text{SrF}_2$ , 1-33 wt%  $\text{BaF}_2$ , 0-8 wt%  $\text{YF}_3$ , 10-36 wt%  $\text{BaO}$ , 1.5-12 wt%  $\text{Y}_2\text{O}_3$  and/or  $\text{Yb}_2\text{O}_3$ , 0-6 wt%  $\text{ZnO}$ , 0-29 wt%  $\text{PbO}$ , 0-22  $\text{Nb}_2\text{O}_5$ . See abstract of Kodama.

Kodama differs from the claims by defining the ranges on a weight percent basis rather than a molecular percent basis. However, it appears that if the composition were converted to mole % and the rare earth component were converted to weight percent in accordance with the instant invention, the composition and the rare earth component of Kodama would overlap the composition and dopant component of the instant invention. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

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Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Claims 1, 2, 4-6, 8-10, 12, 16, 18-20, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prassas, International Patent Publication WO 99/13541 A1.

Prassas teaches an erbium doped fluorophosphates glass comprising  $P_2O_5$  15-40 wt %,  $Al_2O_3$  0-5 wt %,  $MgO$  0-9 wt %,  $CaO$  0-9 wt %,  $SrO$  0-9 wt %,  $BaO$  0-45 wt %,  $AlF_3$  5-25,  $MgF_2$  0-10,  $CaF_2$  0-25,  $SrF_2$  0-25,  $BaF_2$  0-20,  $KHF_2$  0-2, and  $K_2TiF_6$  0-2, and doped with 0.01-10 wt % of  $Er_2O_3$ . See page 4, lines 10-13.

Prassas differs from the claims by defining the ranges on a weight percent basis rather than a molecular percent basis. However, it appears that if the composition were converted to mole % in accordance with the instant invention, the composition of Prassas would overlap the composition and dopant component of the instant invention. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

### ***Response to Arguments***

Applicant's arguments filed 6 June 2006 have been fully considered but they are not persuasive.

The Applicant argues that Tran, U.S. 5,809,199 contains a component LnF where “Ln= Lanthanide (La, Y, Sc,...)” and Applicant states the Ln refers only to the components Y, Sc, and La. However, Tran et al. does recite the component, LnF where Ln= Lanthanide (La, Y, Sc,...), and this is read to include the following components besides La, Y, and Sc, which are also lanthanides: Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu. This argument is not

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deemed persuasive because the intended lanthanide also includes the rare earths recited in the instant claims.

The Applicant argues that Tran, U.S. 5,809,199 further contains light metal fluorides,  $P_2O_5$ ,  $Mg(PO_3)_2$ , and  $NaPO_3$  as well as other non recited components. This argument is not deemed persuasive because the Applicant's present claims do not limit the amount of light metal fluoride,  $P_2O_5$ ,  $Mg(PO_3)_2$ , and  $NaPO_3$  or other components in the composition.

Furthermore, the Applicant uses "comprising" terminology, which allows for the addition of other components even in major amounts. See MPEP 2111.03, which states:

The transitional term "comprising", which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps.

The Applicant argues that Yamazaki et al., U.S. 5,755,998 with respect to claims 1, 8-10, 23, and 24 do not teach the dopant since Yamazaki et al. teach that the Ln is at least one of Y, La, Gd, Yb, Lu Dy, and Tm and Ce. However the listing of Ln includes instantly recited Yb and Tm. Furthermore, Yamazaki et al. teach Eu, Tb, Sm, and Mn. See column 3, lines 25-47. Therefore this argument is not deemed persuasive because the Applicant's present claims do not limit the amount of Y, La, Gd, Lu, Dy, and Ce in the composition. The Applicant further argues that claims 2 and 16-21 are not obvious since Yamazaki et al. teach the use of other components including Li, Na, K, Cl, Zn, Y, and La and the instant claims do not positively recite them. This is not found persuasive since the claims do not limit the amount of these components.

Furthermore, as noted above, the Applicant uses "comprising" terminology, which allows for the addition of other components even in major amounts. See MPEP 2111.03.

The Applicant argues that the glasses of Kodama, U.S. 4,386,163 with respect to claims 1, 8, 9, and 22-24 do not teach the dopant since Kodama teaches that Y, Ca, Zn, Sr, and Nb. However, Kodama teaches the use of  $Yb_2O_3$ . Therefore this argument is not deemed persuasive because the reference teaches one of the recited dopant components  $Yb_2O_3$ , and the Applicant's present claims do not limit the amount of Y, Ca, Zn, Sr, and Nb in the composition. The Applicant further argues that claims 2 and 16-21 are not obvious since Kodama teaches the use

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of other components including Li, Na, K, Cl, Zn, Y, and La and the instant claims do not positively recite them. This is not found persuasive since the claims do not limit the amount of these components.

Furthermore, as noted above, the Applicant uses “comprising” terminology, which allows for the addition of other components even in major amounts. See MPEP 2111.03.

### ***Allowable Subject Matter***

Claim 11 is allowed.

The following is an examiner’s statement of reasons for allowance: The prior art fail to disclose or suggest a barium fluorophosphate glass comprising 10 mol% Ba(PO<sub>3</sub>)<sub>2</sub>, 18 mol% Al(PO<sub>3</sub>)<sub>3</sub>, 72 mol% BaF<sub>2</sub>, and 10 mol% of a dopant, which is Nd<sub>2</sub>O<sub>3</sub>.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is (571)272-1363. The examiner can normally be reached on 10 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Karl E Group/  
Primary Examiner, Art Unit 1731

/Elizabeth A. Bolden/  
Examiner  
Art Unit 1731

EAB  
17 November 2010